LRGRP-encoding transcript by preventing the ribosome from binding. Using an appropriate portion of the leader and 5' sequence of SEQ ID NO:2, an effective antisense oligonucleotide includes any 15-20 nucleotides spanning the region which translates into the signal or early coding sequence of the polypeptide as shown in Figures 1A, 1B and 1C.

BY Cont

The attached page is captioned "Version with markings to show changes made."

CONCLUSION

In light of the above amendments and remarks, Applicants submit that the present application is fully in condition for allowance. Early notice to that effect is earnestly solicited.

If the Examiner contemplates other action, or if a telephone conference would expedite allowance of the claims, Applicants invite the Examiner to contact Applicants' Attorney at (650) 855-0555.

Applicants believe that no fee is due with this communication. However, if the USPTO determines that a fee is due, the Commissioner is hereby authorized to charge Deposit Account No. **09-0108.**

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The paragraph beginning at line 19 of page 3 has been amended as follows:

Figures 1A, 1B and 1C [and 1B] show the amino acid sequence (SEQ ID NO:1) and nucleic acid sequence (SEQ ID NO:2) of the novel leptin receptor gene-related protein, LRGRP produced using MACDNASIS software (Hitachi Software Engineering Co Ltd).

The paragraph beginning at line 17 of page 7 has been amended as follows:

The nucleic acid and deduced amino acid sequences of LRGRP are shown in Figures 1A, 1B and 1C [and 1B]. In accordance with the invention, any nucleic acid sequence which encodes the amino acid sequence of LRGRP can be used to generate recombinant molecules which express LRGRP. In a specific embodiment described herein, a nucleotide sequence encoding a portion of LRGRP was first isolated as Incyte Clone 492703 from a hNT2 cell cDNA library (HNT2NOT01).

The paragraph beginning at line 10 of page 8 has been amended as follows:

Also included within the scope of the present invention are polynucleotide sequences that are capable of hybridizing to the nucleotide sequence of Figures 1A, 1B and 1C [and 1B], or fragments thereof, under various conditions of stringency. Hybridization conditions are based on the melting temperature (Tm) of the nucleic acid binding complex or probe, as taught in Berger and Kimmel (1987, Guide to Molecular Cloning Techniques, Methods in Enzymology, Vol 152, Academic Press, San Diego CA) incorporated herein by reference, and may be used at a defined stringency.

The paragraph beginning at line 25 of page 34 has been amended as follows:

The LRGRP-encoding sequence, or any part thereof, is used to inhibit in vivo or in vitro expression of naturally occurring LRGRP. Although use of antisense oligonucleotides, comprising about 20 base-pairs, is specifically described, essentially the same procedure is used with larger cDNA fragments. An oligonucleotide based on the coding sequence of LRGRP, as shown in Figs. 1A, 1B and

1C [and 1B], is used to inhibit expression of naturally occurring LRGRP. The complementary oligonucleotide is designed from the most unique 5' sequence as shown in Figures 1A, 1B and 1C [and 1B] and used either to inhibit transcription by preventing promoter binding to the upstream nontranslated sequence or translation of an LRGRP-encoding transcript by preventing the ribosome from binding. Using an appropriate portion of the leader and 5' sequence of SEQ ID NO:2, an effective antisense oligonucleotide includes any 15-20 nucleotides spanning the region which translates into the signal or early coding sequence of the polypeptide as shown in Figures 1A, 1B and 1C [and 1B].